

09567863

09/786,666

FILE 'HOME' ENTERED AT 09:01:41 ON 18 DEC 2002

=> file biosis medline caplus wpids uspatfull
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FILE 'BIOSIS' ENTERED AT 09:01:59 ON 18 DEC 2002
COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC. (R)

FILE 'MEDLINE' ENTERED AT 09:01:59 ON 18 DEC 2002

FILE 'CAPLUS' ENTERED AT 09:01:59 ON 18 DEC 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIDS' ENTERED AT 09:01:59 ON 18 DEC 2002
COPYRIGHT (C) 2002 THOMSON DERWENT

FILE 'USPATFULL' ENTERED AT 09:01:59 ON 18 DEC 2002
CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

*** YOU HAVE NEW MAIL ***

=> s pteridine
L1 6574 PTERIDINE

=> s l1 and nucleotide
L2 239 L1 AND NUCLEOTIDE

=> s l2 and hybridization
L3 60 L2 AND HYBRIDIZATION

=> s l3 and pteridine nucelotide?
L4 0 L3 AND PTERIDINE NUCELOTIDE?

=> dup rem l3
PROCESSING COMPLETED FOR L3
L5 57 DUP REM L3 (3 DUPLICATES REMOVED)

=> s l5 and loop
L6 17 L5 AND LOOP

=> d l6 bib abs 1-17

L6 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2002 ACS
AN 1998:406099 CAPLUS
DN 129:77559
TI Fluorescent **nucleotide** analog hairpin formation for detection of
nucleic acid **hybridization**
IN Hawkins, Mary
PA United States Dept. of Health and Human Services, USA; Hawkins, Mary
SO PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9826093	A2	19980618	WO 1997-US22448	19971210

09567863

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
 DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP,
 KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
 NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA,
 UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
 FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
 GA, GN, ML, MR, NE, SN, TD, TG

AU 9878477 A1 19980703 AU 1998-78477 19971210
 US 6451530 B1 20020917 US 1999-319648 19990730
 PRAI US 1996-32844P P 19961213
 WO 1997-US22448 W 19971210

AB This invention provides methods and compns. for the detection of nucleic acid interactions with other nucleic acids or with proteins. The methods generally utilize a nucleic acid (e.g., an oligonucleotide) that contains one or more fluorescent **nucleotide** analogs in a non-complementary **loop** region that does not participate in **hybridization** to the target nucleic acid.. The fluorescence of the **nucleotide** analogs is quenched (reduced) when they are incorporated into the oligonucleotide. Alteration of the normal conformation of the oligonucleotide by **hybridization** (e.g. to form a **loop**) or by protein binding reduces and/or eliminates the quench thereby causing a detectable increase in fluorescence. The **nucleotide** closest to the fluorescent **nucleotide** within the oligonucleotide (esp. adenosine) has the most important effect on fluorescence with diminishing effect with increasing distance from the fluorescent **nucleotide**. A no. of fluorescent **nucleotide** analogs are provided, with 2-aminopurine and 3-methyl-8-(2-deoxy-.beta.-D-ribofuranosyl)isoxanthopterin demonstrating good fluorescence properties. Restriction endonuclease digestion of large labeled nucleic acids enhances the label signal. In nucleic acid amplification techniques, the labeled probe can be designed to not act as primer but to hybridize to the amplification product.

L6 ANSWER 2 OF 17 USPATFULL
 AN 2002:279998 USPATFULL
 TI Genetically engineered herpes virus for the treatment of cardiovascular disease
 IN Schwartz, Lewis B., Hinsdale, IL, UNITED STATES
 Weichselbaum, Ralph R., Chicago, IL, UNITED STATES
 Roizman, Bernard, Chicago, IL, UNITED STATES
 PI US 2002155432 A1 20021024
 AI US 2001-995475 A1 20011128 (9)
 PRAI US 2000-253680P 20001128 (60)
 DT Utility
 FS APPLICATION
 LREP MARSHALL, GERSTEIN & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER, CHICAGO, IL, 60606-6357
 CLMN Number of Claims: 33
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 4203

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods of expressing a nucleic acid or producing a proteinaceous composition encoded by a nucleic acid in vascular and cardiovascular cells by administration of a herpesvirus vector. The present invention provides methods of producing a therapeutic benefit in vascular and cardiovascular tissue by administration of a herpesvirus vector. In additional aspects, the invention concerns combination therapies for vascular and cardiovascular diseases comprising administration of a herpesvirus vector and treatment with at least one addition pharmacological agent or surgical procedure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 3 OF 17 USPATFULL
AN 2002:273335 USPATFULL
TI Agouti polynucleotide compositions and methods of use
IN Woychik, Richard P., Orinda, CA, UNITED STATES
Bultman, Scott J., Lakewood, OH, UNITED STATES
Michaud, Edward J., UNITED STATES
PI US 2002151463 A1 20021017
AI US 2001-781811 A1 20010212 (9)
RLI Division of Ser. No. US 1998-34088, filed on 3 Mar 1998, GRANTED, Pat.
No. US 6310034 Continuation-in-part of Ser. No. US 1993-64385, filed on
21 May 1993, ABANDONED
DT Utility
FS APPLICATION
LREP GREGORY A. NELSON, AKERMAN, SENTERFITT AND EIDSON, P.A., 222 LAKEVIEW
AVENUE, SUITE 400, P.O.BOX 3188, WEST PALM BEACH, FL, 33402-3188
CLMN Number of Claims: 50
ECL Exemplary Claim: 1
DRWN 41 Drawing Page(s)
LN.CNT 11146

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are methods and compositions comprising novel agouti polypeptides and the polynucleotides which encode them. Also disclosed are DNA segments encoding these proteins derived from human and murine cell lines, and the use of these polynucleotides and polypeptides in a variety of diagnostic and therapeutic applications. Methods, compositions, kits, and devices are also provided for identifying compounds which are inhibitors of agouti activity, and for altering fatty acid synthetase activity and intracellular calcium levels in transformed cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 4 OF 17 USPATFULL
AN 2002:246537 USPATFULL
TI Endonuclease compositions and methods of use
IN Aguilera, Renato J., Culver City, CA, United States
Lyon, Christopher J., Los Angeles, CA, United States
PA The Regents of the University of California, Oakland, CA, United States
(U.S. corporation)
PI US 6455250 B1 20020924
AI US 1998-210422 19981211 (9)
PRAI US 1997-69205P 19971211 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Priebe, Scott D.; Assistant Examiner: Chen, Shin-Lin
LREP Mandel & Adriano
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 6414

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are methods for modulating apoptosis and altering programmed cell death events using novel Endo-SR gene compositions and the polypeptides encoded thereby. Also disclosed are methods for repairing DNA, modulating genetic recombination in a cell, and altering DNA rearrangement in a host cell. Also disclosed are methods for the design and isolation of peptidomimetics and other inhibitors of Endo-SR useful in the treatment of leukemias, lymphomas, and other cancers.

09567863

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 5 OF 17 USPATFULL
AN 2002:238819 USPATFULL
TI Fluorescent **nucleotide** analog hairpin formation for detection
of nucleic acid **hybridization**
IN Hawkins, Mary, Potomac, MD, United States
PA The United States of America as represented by the Department of Health
and Human Services, Washington, DC, United States (U.S. government)
PI US 6451530 B1 20020917
WO 9826093 19980618
AI US 1999-319648 19990730 (9)
WO 1997-US22448 19971210
19990730 PCT 371 date
PRAI US 1996-32844P 19961213 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Brusca, John S.
LREP Townsend and Townsend and Crew, LLP
CLMN Number of Claims: 35
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 2151

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods and compositions for the detection of
nucleic acid interactions with other nucleic acids or with proteins. The
methods generally utilize a nucleic acid (e.g., an oligonucleotide) that
contains one or more fluorescent **nucleotide** analogues. The
fluorescence of the **nucleotide** analogues is quenched (reduced)
when they are incorporated into the oligonucleotide. Alteration of the
normal conformation of the oligonucleotide by **hybridization**
(e.g. to form a **loop**) or by protein binding reduces and/or
eliminates the quench thereby causing a detectable increase in
fluorescence.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 6 OF 17 USPATFULL
AN 2002:235434 USPATFULL
TI Biosensors, reagents and diagnostic applications of directed evolution
IN Minshull, Jeremy, Menlo Park, CA, UNITED STATES
Davis, S. Christopher, San Francisco, CA, UNITED STATES
Welch, Mark, Fremont, CA, UNITED STATES
Raillard, Sun Ai, Mountain View, CA, UNITED STATES
Vogel, Kurt, Palo Alto, CA, UNITED STATES
Krebber, Claus, Mountain View, CA, UNITED STATES
PA Maxygen, Inc., Redwood City, CA (U.S. corporation)
PI US 2002127623 A1 20020912
AI US 2001-920607 A1 20010731 (9)
PRAI US 2000-222056P 20000731 (60)
US 2000-244764P 20001031 (60)
DT Utility
FS APPLICATION
LREP LAW OFFICES OF JONATHAN ALAN QUINE, P O BOX 458, ALAMEDA, CA, 94501
CLMN Number of Claims: 130
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 6877

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for sensing test stimuli using arrays of biopolymers are
provided. Libraries of biopolymers, such nucleic acid variants, and
expression products encoded by nucleic acid variants are provided.

09567863

Reusable library arrays, and methods for their use are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 7 OF 17 USPATFULL
AN 2002:157625 USPATFULL
TI Antisense oligomer
IN Douvdevani, Amos, Beer Sheva, ISRAEL
Chaimovitz, Cidio, Omer, ISRAEL
PI US 2002082230 A1 20020627
AI US 2001-849014 A1 20010504 (9)
RLI Continuation of Ser. No. WO 1999-IL589, filed on 4 Nov 1999, UNKNOWN
PRAI IL 1998-126969 19981105
IL 1998-126919 19980511
DT Utility
FS APPLICATION
LREP BAKER & BOTTS, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112
CLMN Number of Claims: 40
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 906

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An antisense oligomer capable of inhibiting production of interleukin-15 (IL-15) by hybridizing to the mRNA of IL-15. Also disclosed is a pharmaceutical composition for treating diseases associated with the production of IL-15 comprising said antisense oligomer and a pharmaceutically acceptable carrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 8 OF 17 USPATFULL
AN 2002:105944 USPATFULL
TI Inefficient fast PCR
IN Kopf-Sill, Anne R., Portola Valley, CA, UNITED STATES
PI US 2002055149 A1 20020509
AI US 2001-943070 A1 20010829 (9)
RLI Division of Ser. No. US 1999-287069, filed on 6 Apr 1999, GRANTED, Pat. No. US 6303343
DT Utility
FS APPLICATION
LREP LAW OFFICES OF JONATHAN ALAN QUINE, P O BOX 458, ALAMEDA, CA, 94501
CLMN Number of Claims: 126
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 2075

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods of performing fast polymerase mediated reactions are provided. These reactions can be used in an inefficient fashion in the cycles of the polymerase mediated reactions to produce product at a much faster rate than conventional polymerase mediated reaction methods. Integrated systems for performing these methods are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 9 OF 17 USPATFULL
AN 2002:64020 USPATFULL
TI Non-nucleotide containing nucleic acid
IN Usman, Nassim, Boulder, CO, United States
Wincott, Francine, Longmont, CO, United States
Matulic-Adamic, Jasenka, Boulder, CO, United States
Beigelman, Leonid, Longmont, CO, United States
Karpeisky, Alex, Boulder, CO, United States

09567863

PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 6362323 B1 20020326
AI US 2000-628959 20000731 (9)
RLI Continuation of Ser. No. US 1998-182975, filed on 29 Oct 1998, now patented, Pat. No. US 6117657 Continuation of Ser. No. US 1994-363253, filed on 23 Dec 1994, now patented, Pat. No. US 5891683
Continuation-in-part of Ser. No. US 1994-233748, filed on 19 Apr 1994, now abandoned Continuation-in-part of Ser. No. US 1993-152481, filed on 12 Nov 1993, now abandoned Continuation-in-part of Ser. No. US 1993-116177, filed on 2 Sep 1993, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Riley, Jezia
LREP McDonnell Boehnen Hulbert & Berghoff
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 24 Drawing Figure(s); 21 Drawing Page(s)
LN.CNT 1235
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Enzymatic nucleic acid molecule containing one or more non-nucleotide mimetics, and having activity to cleave an RNA or DNA molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 10 OF 17 USPATFULL
AN 2001:191105 USPATFULL
TI Agouti polypeptide compositions
IN Woychik, Richard P., Orinda, CA, United States
Bultman, Scott J., Lakewood, OH, United States
Michaud, Edward J., Kingston, TN, United States
PA UT-Battelle, LLC, Oak Ridge, TN, United States (U.S. corporation)
PI US 6310034 B1 20011030
AI US 1998-34088 19980303 (9)
RLI Continuation-in-part of Ser. No. US 1993-64385, filed on 21 May 1993, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Kammerer, Elyabik C.
LREP Williams, Morgan & Amerson
CLMN Number of Claims: 34
ECL Exemplary Claim: 1
DRWN 83 Drawing Figure(s); 41 Drawing Page(s)
LN.CNT 10935
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are methods and compositions comprising novel agouti polypeptides and the polynucleotides which encode them. Also disclosed are DNA segments encoding these proteins derived from human and murine cell lines, and the use of these polynucleotides and polypeptides in a variety of diagnostic and therapeutic applications. Methods, compositions, kits, and devices are also provided for identifying compounds which are inhibitors of agouti activity, and for altering fatty acid synthetase activity and intracellular calcium levels in transformed cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 11 OF 17 USPATFULL
AN 2001:178847 USPATFULL
TI Inefficient fast PCR
IN Kopf-Sill, Anne R., Portola Valley, CA, United States

09567863

PA Caliper Technologies Corp., Mountain View, CA, United States (U.S. corporation)
PI US 6303343 B1 20011016
AI US 1999-287069 19990406 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Chakrabarti, Arun Kr.
LREP Murphy, Matthew B., Quine, Jonathan Alan Law Offices of Jonathan Alan Quine
CLMN Number of Claims: 104
ECL Exemplary Claim: 1
DRWN 2 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1992

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods of performing fast polymerase mediated reactions are provided. These reactions can be used in an inefficient fashion in the cycles of the polymerase mediated reactions to produce product at a much faster rate than conventional polymerase mediated reaction methods. Integrated systems for performing these methods are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 12 OF 17 USPATFULL
AN 2001:93490 USPATFULL
TI Antisense oligonucleotide compositions targeted to angiotensin converting enzyme mRNA and methods of use
IN Moore, Mark D., Houston, TX, United States
Phillips, M. Ian, Gainesville, FL, United States
Mohuczy, Dagmara, Gainesville, FL, United States
PA University of Florida, Gainesville, FL, United States (U.S. corporation)
PI US 6248724 B1 20010619
AI US 1998-162484 19980925 (9)
PRAI US 1997-59661P 19970925 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Schwartzman, Robert A.; Assistant Examiner: Epps, Janet
LREP Williams, Morgan & Amerson, P.C.
CLMN Number of Claims: 59
ECL Exemplary Claim: 1
DRWN 2 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 4383

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Antisense oligonucleotides specific for mammalian ACE mRNA have been identified. Administration of these oligonucleotides to animals resulted in a decrease in blood pressure, but no significant change in heart rate. Methods for discovering other oligonucleotides with the same activity are taught, as are uses of the antisense molecules for treatment of human and animal diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 13 OF 17 USPATFULL
AN 2000:137814 USPATFULL
TI Allelic polygene diagnosis of reward deficiency syndrome and treatment
IN Blum, Kenneth, San Antonio, TX, United States
PA City of Hope National Medical Center, Duarte, CA, United States (U.S. corporation)
The University of Texas System AMD Board of Regents, Austin, TX, United States (U.S. corporation)
PI US 6132724 20001017

AI US 1998-69886 19980429 (9)
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Witz, Jean C.
 LREP Hodgins, Daniel S.
 CLMN Number of Claims: 9
 ECL Exemplary Claim: 1
 DRWN 8 Drawing Figure(s); 8 Drawing Page(s)
 LN.CNT 20845
 AB Enhancement of attentional processing is attained by administration of an endorphinase inhibitor or enkephalinase inhibitor and optionally, a dopamine precursor, or a serotonin precursor, a GABA precursor, or an endorphin or enkephalinase releaser, or certain herbal compounds including *Rhodiola rosea* extract (Pharmaline) and/or Huperzine. These components promote restoration of normal neurotransmitter function and the components combined enhance the release of dopamine at the nucleus accumbens and are non-addictive. Use of the dopamine precursors L-phenylalanine, or L-Tyrosine, the enkephalinase inhibitor D-phenylalanine, and/or the serotonin precursor -hydroxytryptophan and a natural acetylcholinesterase inhibitor and chromium salts (i.e. picolinate, nicotinate, etc.) is especially preferred, but not limited to assist in relieving symptoms associated with brain phenylalanine deficiency.

L6 ANSWER 14 OF 17 USPATFULL
 AN 2000:121300 USPATFULL
 TI Non-**nucleotide** containing enzymatic nucleic acid
 IN Usman, Nassim, Boulder, CO, United States
 Wincott, Francine, Longmont, CO, United States
 Matulic-Adamic, Jasenka, Boulder, CO, United States
 Beigelman, Leonid, Longmont, CO, United States
 Karpeisky, Alex, Boulder, CO, United States
 PA Ribozyne Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
 PI US 6117657 20000912
 AI US 1998-182975 19981029 (9)
 RLI Continuation of Ser. No. US 1994-363253, filed on 23 Dec 1994, now patented, Pat. No. US 5891683 which is a continuation-in-part of Ser. No. US 1994-233748, filed on 19 Apr 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-152481, filed on 12 Nov 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-116177, filed on 2 Sep 1993, now abandoned
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Riley, Jeziz
 CLMN Number of Claims: 13
 ECL Exemplary Claim: 1
 DRWN 22 Drawing Figure(s); 19 Drawing Page(s)
 LN.CNT 1377
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB Enzymatic nucleic acid molecule containing one or more non-**nucleotide** mimetics, and having activity to cleave an RNA or DNA molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 15 OF 17 USPATFULL
 AN 2000:12625 USPATFULL
 TI Crystal of a protein-ligand complex containing an N-terminal truncated eIF4E, and methods of use thereof
 IN Burley, Stephen K., New York, NY, United States

Sonenberg, Nahum, Cote St-Luc, Canada
 Marcotrigiano, Joseph, New York, NY, United States
 Gingras, Anne-Claude, Montreal, Canada
 PA The Rockefeller University, New York, NY, United States (U.S. corporation)
 McGill University, Montreal, Canada (non-U.S. corporation)
 PI US 6020162 20000201
 AI US 1998-97233 19980612 (9)
 PRAI US 1997-50054P 19970613 (60)
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Patterson, Jr., Charles L.
 LREP Klauber & Jackson
 CLMN Number of Claims: 6
 ECL Exemplary Claim: 1
 DRWN 13 Drawing Figure(s); 6 Drawing Page(s)
 LN.CNT 2874

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A detailed three-dimensional structure for the least abundant of the general translation initiation factors in eukaryotes, eIF4E, complexed with a ligand is disclosed. The novel N-terminal truncated eIF4Es which were constructed so as to omit a significant portion of the flexible N-terminal tail of the eIF4E are also part of the present invention. In addition, the crystals of the protein-ligand complexes containing the N-terminal truncated eIF4Es are also included. Furthermore, methods of identifying antagonists of the eIF4E protein which can be used to regulate protein synthesis in cells are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 16 OF 17 USPATFULL
 AN 1999:43431 USPATFULL
 TI Non-**nucleotide** containing enzymatic nucleic acid
 IN Usman, Nassim, Boulder, CO, United States
 Wincott, Francine, Longmont, CO, United States
 Matulic-Adamic, Jasenka, Boulder, CO, United States
 Beigelman, Leonid, Longmont, CO, United States
 Karpeisky, Alex, Boulder, CO, United States
 PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
 PI US 5891683 19990406
 AI US 1994-363253 19941223 (8)
 RLI Continuation-in-part of Ser. No. US 1994-233748, filed on 19 Apr 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-152481, filed on 12 Nov 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-116177, filed on 2 Sep 1993, now abandoned
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Marschel, Ardin H.; Assistant Examiner: Riley, Jezia
 LREP Lyon & Lyon LLP
 CLMN Number of Claims: 16
 ECL Exemplary Claim: 1
 DRWN 24 Drawing Figure(s); 21 Drawing Page(s)
 LN.CNT 1347

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Enzymatic nucleic acid molecule containing one or more non-**nucleotide** mimetics, and having activity to cleave an RNA or DNA molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 17 OF 17 USPATFULL
 AN 1999:21992 USPATFULL
 TI Crystal of a protein-ligand complex containing an N-terminal truncated eIF4E, and methods of use thereof
 IN Burley, Stephen K., New York, NY, United States
 Sonenberg, Nahum, Cote St-Luc, Canada
 Marcotrigiano, Joseph, New York, NY, United States
 Gingras, Anne-Claude, Montreal, Canada
 PA The Rockefeller University, New York, NY, United States (U.S. corporation)
 McGill University, Montreal, Canada (non-U.S. corporation)
 PI US 5872011 19990216
 AI US 1997-874832 19970613 (8)
 DT Utility
 FS Granted
 EXNAM Primary Examiner: Patterson, Jr., Charles L.
 LREP Klauber & Jackson
 CLMN Number of Claims: 21
 ECL Exemplary Claim: 1
 DRWN 15 Drawing Figure(s); 6 Drawing Page(s)
 LN.CNT 2691
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB A detailed three-dimensional structure for the least abundant of the general translation initiation factors in eukaryotes, eIF4E, complexed with a ligand is disclosed. The novel N-terminal truncated eIF4Es which were constructed so as to omit a significant portion of the flexible N-terminal tail of the eIF4E are also part of the present invention. In addition, the crystals of the protein-ligand complexes containing the N-terminal truncated eIF4Es are also included. Furthermore, methods of identifying antagonists of the eIF4E protein which can be used to regulate protein synthesis in cells are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 19 5 clm

L9 NOT FOUND

The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> d 16 5 clm

L6 ANSWER 5 OF 17 USPATFULL

CLM What is claimed is:

1. A method of detecting the presence, absence, or quantity of a target nucleic acid, said method comprising the steps of: contacting said target nucleic acid with a nucleic acid probe wherein said nucleic acid probe comprises a fluorescent **nucleotide** located in said probe such that, when said probe, hybridizes to said target nucleic acid the fluorescent **nucleotide** is in a **loop** that does not participate in complementary base pairing with a **nucleotide** of said target nucleic acid; and detecting the fluorescence produced by said fluorescent **nucleotide**, when said probe is hybridized to said target nucleic acid.

2. A oligonucleotide comprising a fluorescent **nucleotide** wherein said oligonucleotide is hybridized to a target nucleic acid forming a hybrid duplex in which said fluorescent **nucleotide** does not participate in complementary base pairing with a **nucleotide** of said target nucleic acid, further wherein said fluorescent **nucleotide** does not interact with a second

fluorophore.

3. The method of claim 1, wherein said **loop** ranges in length from about 1 to about 100 nucleotides when said probe hybridizes to said target nucleic acid.
4. The method of claim 3, wherein said **loop** is an insertion in said nucleic acid probe which probe is complementary to said target nucleic acid or to a contiguous subsequence of said target nucleic acid, and further wherein said **loop** is not complementary to said target nucleic acid or to a contiguous subsequence of said target nucleic acid.
5. The method of claim 4, wherein said insertion is three nucleotides in length and comprises two nucleotides each adjacent to said fluorescent **nucleotide** in addition to said fluorescent **nucleotide**.
6. The method of claim 4, wherein at least one **nucleotide** adjacent to said fluorescent **nucleotide** is a purine.
7. The method of claim 6, wherein at least one **nucleotide** adjacent to said fluorescent **nucleotide** is an adenosine.
8. The method of claim 6, wherein said fluorescent **nucleotide** is bordered by at least two adjacent purines in both the 5' and 3' direction.
9. The method of claim 8, wherein said adjacent purines are adenosine.
10. The method of claim 4, wherein said insertion is said fluorescent **nucleotide**.
11. The method of claim 4, wherein said insertion is self-complementary and forms a hairpin wherein said fluorescent **nucleotide** is present in the **loop** of said hairpin and does not participate in complementary base pairing.
12. The method of claim 3, wherein the nucleotides comprising said **loop** are selected such that they are not complementary to the corresponding nucleotides of the target nucleic acid when said probe is hybridized to said target nucleic acid and wherein said probe is complementary to at least two non-contiguous subsequences of said target nucleic acid.
13. The method of claim 1, wherein said fluorescent **nucleotide** is present in a terminal subsequence of said nucleic acid probe, wherein said terminal subsequence does not hybridize to said target nucleic acid when said nucleic acid probe hybridizes to said target nucleic acid.
14. The method of claim 13, wherein said terminal subsequence forms a terminal hairpin by **hybridization** with a second subsequence of said probe such that said fluorescent **nucleotide** is present in a **loop** of said hairpin and does not participate in complementary base pairing.
15. The method of claim 1, wherein said detecting comprises detecting an increase in fluorescence of said fluorescent **nucleotide** when said probe forms a hybrid duplex, with said target nucleic acid.
16. The method of claim 1, wherein said fluorescent **nucleotide** is selected from the group consisting of a **pteridine nucleotide**, a lumazine **nucleotide**,

- 3-methyl-8-(2-deoxy-.beta.-D-ribofuranosyl) isoxanthopterin, and 6-methyl-8-(2-deoxy-.beta.-D-ribofuranosyl) isoxanthopterin.
17. The method of claim 16, wherein said fluorescent **nucleotide** is selected from the group consisting of 2-amino-2-phenyl-8-(2-deoxy-.beta.-D-ribofuranosyl)**pteridine**-7-one, 4-amino-6-phenyl-8-(2-deoxy-.beta.-D-ribofuranosyl)-**pteridine**-7-one, 3-methyl-8-(2-deoxy-.beta.-D-ribofuranosyl) isoxanthopterin, 2'-deoxy-.beta.-D-ribofuranosyl-isoxanthopterin, 2-amino-6-methyl-4-oxo-8-(2-deoxy-.beta.-D-ribofuranosyl)-**pteridine**-7-one, 6,7-dimethyl-4-amino-1-(2-deoxy-.beta.-D-ribofuranosyl)-**pteridine**-2-one, 4-amino-1-(2-deoxy-.beta.-D-ribofuranosyl)-7-methyl-**pteridine**-2-one, 4-amino-1-(2-deoxy-.beta.-D-ribofuranosyl)-6-methyl-**pteridine**-2-one, and 2-amino-1-(2-deoxy-.beta.-D-ribofuranosyl)-**pteridine**-2-one.
18. The method of claim 16, wherein said fluorescent **nucleotide** is 2 amino purine.
19. The method of claim 1, wherein said method further comprises cutting said target nucleic acid to an average length of between about twenty times as long as said nucleic acid probe to about one times as long as said probe.
20. The method of claim 19, wherein said characteristic average length is approximately the length of said nucleic acid probe.
21. The method of claim 19, wherein said cutting is by treatment with a restriction endonuclease.
22. The label of claim 2, wherein said fluorescent **nucleotide** is present in a subsequence of said probe that forms a **loop** ranging in length from about 1 to about 100 nucleotides, when said probe hybridizes to said target nucleic acid.
23. The label of claim 22, wherein said **loop** is an insertion in said nucleic acid probe which probe is complementary to said target nucleic acid or to a contiguous subsequence of said target nucleic acid, and further wherein said **loop** is not complementary to said target nucleic acid or to a contiguous subsequence of said target nucleic acid.
24. The label of claim 23, wherein said at least one **nucleotide** adjacent to said fluorescent **nucleotide** is a purine.
25. The label of claim 23, wherein said insertion is three nucleotides in length and comprises two nucleotides each adjacent to said fluorescent **nucleotide** in addition to said fluorescent **nucleotide**.
26. The label of claim 23, wherein said insertion is said fluorescent **nucleotide**.
27. The label of claim 23, wherein said insertion is self-complementary and forms a hairpin wherein said fluorescent **nucleotide** is present in the **loop** of said hairpin and does not participate in complementary base pairing.
28. The label of claim 22, wherein said **loop** comprises contiguous nucleotides selected such that they are not complementary to the corresponding nucleotides of the target nucleic acid when said probe is hybridized to said target nucleic acid and wherein said probe is

complementary to at least two non-contiguous subsequences of said target nucleic acid.

29. The label of claim 2, wherein said fluorescent **nucleotide** is present in a terminal subsequence of said nucleic acid probe, wherein said terminal subsequence does not hybridize to said target nucleic acid when said nucleic acid probe hybridizes to said target nucleic acid.

30. The label of claim 29, wherein said terminal subsequence forms a terminal hairpin by **hybridization** with a second subsequence of said probe such that said fluorescent **nucleotide** is present in a **loop** of said hairpin and does not participate in complementary base pairing.

31. The label of claim 2, wherein said fluorescent **nucleotide** is selected from the group consisting of a **pteridine nucleotide**, a lumazine **nucleotide**, 2 amino purine, 3-methyl-8-(2-deoxy-.beta.-D-ribofuranosyl)isoxanpterin, and 6-methyl-8-(2-deoxy-.beta.-D-ribofuranosyl) isoxanthopterin.

32. The label of claim 2, wherein said fluorescent **nucleotide** is selected from the group consisting of 2-amino-2-phenyl-8-(2-deoxy-.beta.-D-ribofuranosyl)**pteridine**-7-one, 4-amino-6-phenyl-8-(2-deoxy-.beta.-D-ribofuranosyl)p**pteridine**-7-one, 3-methyl-8-(2-deoxy-.beta.-D-ribofuranosyl) isoxanthopterin, 2'-deoxy-.beta.-D ribofuranosyl-isoxanthopterin, 2-amino-6-methyl-4-oxo-8-(2-deoxy-.beta.-D-ribofuranosyl)-**pteridine**-7-one, 6,7-dimethyl-4-amino-1-(2-deoxy-.beta.-D-ribofuranosyl)-**pteridine**-2-one, 4-amino-1-(2-deoxy-.beta.-D-ribofuranosyl)-7-methyl-**pteridine**-2-one, 4-amino-1-(2-deoxy-.beta.-D-ribofuranosyl)-6-methyl-**pteridine**-2-one, and 2-amino-1-(2-deoxy-.beta.-D-ribofuranosyl)-**pteridine**-2-one.

33. The label of claim 31, wherein said fluorescent **nucleotide** is 2 amino purine.

34. The label of claim 2, wherein said fluorescent **nucleotide** is 3-methyl-8-(2-deoxy-.beta.-D-ribofuranosyl) isoxanthopterin.

35. A kit comprising a container containing a fluorescent label of claim 2.